

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A golf ball comprising a core and a cover, wherein at least one of the core and the cover is cast from a castable reactive acrylate functional composition comprising:
at least one acrylate functional component; and
at least one free radical initiator.
2. (Original) The golf ball of claim 1, wherein the at least one acrylate functional component is selected from the group consisting of monofunctional, difunctional, trifunctional, tetrafunctional, and pentafunctional monomers and oligomers, and combinations thereof.
3. (Original) The golf ball of claim 1, wherein the at least one acrylate functional component comprises about 1 percent to about 100 percent urethane acrylate, urea acrylate, or a combination thereof.
4. (Original) The golf ball of claim 1, wherein the at least one acrylate functional component is selected from the group consisting of water dispersible monomers, adhesion promoting monomers, pigment dispersing monomers, fire retarding monomers, metallic diacrylate, metallic dimethacrylate, epoxy acrylates, epoxy methacrylates, acrylate half esters, methacrylate half esters, polybutadiene acrylates, and combinations thereof.
5. (Original) The golf ball of claim 1, wherein the at least one acrylate functional component has a viscosity of about 100 cP or greater.
6. (Original) The golf ball of claim 1, wherein the at least one free radical initiator comprises at least one peroxide.

7. (Original) The golf ball of claim 1, wherein the at least one free radical initiator comprises at least one azo compound.
8. (Original) The golf ball of claim 6, wherein the at least one free radical initiator is selected from the group consisting of di-t-amyl peroxide, tert-amyl peroxy-2-ethylhexyl carbonate, t-amyl peroxyacetate, ethyl 3,3-D (t-amylperoxy) butyrate, 2,2-di-(t-amylperoxy) propane, t-amyl perbenzoate, di(2-t-butyl-peroxyisopropyl)benzene peroxide, 1,1-bis(t-butylperoxy)-3,3,5-trimethylcyclohexane, dicumyl peroxide, di-t-butyl peroxide, 2,5-di-(t-butylperoxy)-2,5-dimethyl hexane, n-butyl-4,4-bis(t-butylperoxy)valerate, lauryl peroxide, benzoyl peroxide, t-butyl hydroperoxide, and mixtures thereof.
9. (Original) The golf ball of claim 1, further comprising an intermediate layer.
10. (Original) The golf ball of claim 9, wherein the intermediate layer comprises an ionomeric material.
11. (Original) The golf ball of claim 1, wherein the golf ball further comprises at least one top coat disposed about the cover.
12. (Original) The golf ball of claim 11, wherein the cover has a thickness of about 50 μm or greater.
13. (Original) The golf ball of claim 12, wherein the cover has a thickness of about 0.2 inches to about 0.035 inches.

14. – 31. (Canceled)

Please add the following claims:

32. (New) A golf ball comprising at least one structural layer formed from an acrylate functional composition comprising:
- a polyurethane backbone formed from the reaction of at least one isocyanate and at least one polyol;
 - at least one unsaturated acrylate functional segment reacted with the polyurethane backbone; and
 - at least one free radical initiator.
33. (New) The golf ball of claim 32, wherein the at least one unsaturated acrylate functional segment comprises hydroxy-terminated acrylates, amine-terminated acrylates, or mixtures thereof.
34. (New) The composition of claim 33, wherein the at least one acrylate functional segment comprises hydroxy-terminated acrylate, methacrylate, methyl methacrylate, ethyl acrylate, ethyl methacrylate, butyl acrylate, butyl methacrylate, glycidyl acrylate, glycidal methacrylate, or mixtures thereof.
35. (New) The composition of claim 32, wherein the at least one free radical initiator comprises at least one peroxide.
36. (New) The composition of claim 35, wherein the at least one free radical initiator comprises di-t-amyl peroxide, di(2-t-butyl-peroxyisopropyl)benzene peroxide, 1,1-bis(t-butylperoxy)-3,3,5-trimethylcyclohexane, dicumyl peroxide, di-t-butyl peroxide, 2,5-di-(t-butylperoxy)-2,5-dimethyl hexane, n-butyl-4,4-bis(t-butylperoxy)valerate, lauryl peroxide, benzoyl peroxide, t-butyl hydroperoxide, or mixtures thereof.
37. (New) The composition of claim 35, wherein the at least one free radical initiator is selected from the group consisting of di-t-amyl peroxide, tert-amyl peroxy-2-ethylhexyl carbonate, t-amyl peroxyacetate, ethyl 3,3-D (t-amylperoxy) butyrate, 2,2-di-(t-amylperoxy)

propane, t-amyl perbenzoate, and mixtures thereof.

38. (New) The composition of claim 32, wherein the at least one structural layer comprises a cover layer of the golf ball.

39. (New) The composition of claim 32, wherein the composition comprises about 1 to about 100 percent of urethane acrylate and about 99 percent to 0 percent of at least one unsaturated acrylate resin.

40. (New) The composition of claim 39, wherein the at least one unsaturated acrylate resin comprises epoxy acrylates, epoxy methacrylates, acrylate half esters, methacrylate half esters, polybutadiene acrylates, urea acrylates, and combinations thereof.

41. (New) A golf ball comprising at least one structural layer formed from an acrylate functional composition comprising:

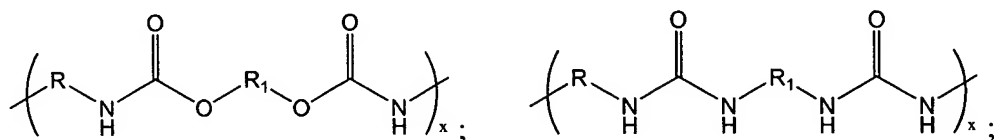
- a polyurea backbone formed from the reaction of at least one isocyanate, at least one amine-terminated compound;
- at least one unsaturated acrylate functional segment reacted with the polyurea backbone; and
- at least one free radical initiator.

42. (New) The composition of claim 41, wherein the at least one unsaturated acrylate functional segment comprises acrylate, methacrylate, methyl methacrylate, ethyl acrylate, ethyl methacrylate, butyl acrylate, butyl methacrylate, glycidyl acrylate, glycidial methacrylate, or mixtures thereof.

43. (New) The composition of claim 41, wherein the amine-terminated compound is selected from the group consisting of amine-terminated hydrocarbons, amine-terminated polyethers, amine-terminated polyesters, amine-terminated polycaprolactones, amine-terminated polycarbonates, amine-terminated polyamides, and mixtures thereof.

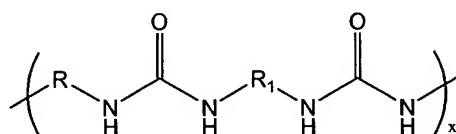
44. (New) The composition of claim 43, wherein the amine-terminated compound comprises primary amines, secondary amines, triamines, or combinations thereof.

45. (New) The composition of claim 41, wherein the polyurea backbone comprises linkages having the general formulae:



or a mixture thereof, wherein x is the chain length, *i.e.*, about 1 or greater, and wherein R and R₁ are straight chain or branched hydrocarbon chains having about 1 to about 20 carbons, and wherein the linkages form greater than about 10 percent of the polyurea backbone.

46. (New) The composition of claim 41, wherein the polyurea backbone consists essentially of linkages having the general formula:



wherein x is the chain length, *i.e.*, about 1 or greater, and wherein R and R₁ comprise straight chain or branched hydrocarbon chains having about 1 to about 20 carbons, and wherein the linkages form greater than about 10 percent of the polyurea backbone.

47. (New) The composition of claim 41, wherein the at least one structural layer comprises a cover layer.

48. (New) The composition of claim 41, wherein the at least one free radical initiator is selected from the group consisting of di-t-amyl peroxide, tert-amyl peroxy-2-ethylhexyl carbonate, t-amyl peroxyacetate, ethyl 3,3-D (t-amylperoxy) butyrate, 2,2-di-(t-amylperoxy) propane, t-amyl perbenzoate, and mixtures thereof.

49. (New) The composition of claim 41, wherein the composition comprises about 1 to about 100 percent of urea acrylate and about 99 percent to 0 percent of at least one unsaturated acrylate resin.